

REMARKS

Applicant has amended the claims, and submits that the amended claims overcome all objections and rejections, for the reasons given below.

With respect to the claim objections stated in Paragraph 3 of the Official Action, Applicant has amended the claims to insert the indefinite article into the preamble of each claim. Applicant believes that the objections are thereby overcome.

Applicant has amended the claims to overcome the rejections under Section 112. In particular, Claims 1 and 4 have been amended to recite that the "transmitted messages" are messages transmitted between the server and the client. Claims 1 and 4 have been amended to recite that it is the representative of the authority that is inserted into the network.

With respect to the translation of transmitted messages, the "translation" refers to possible modification of messages, as further explained in the dependent claims, mainly Claims 2 and 3. In these claims, the modification of messages is a change in protocol. The change could also be a change in the public key. In other words, the contemplated change may modify the information relating to security, included in the messages, as required to implement the authority's message exchange rules.

Applicant submits that the claims, as amended, fulfill the requirements of Section 112.

The Examiner has rejected the claims under Section 101 as non-statutory. Applicant submits that the claims, as amended, define statutory subject matter.

In particular, Claim 4, relating to an apparatus, is defined to comprise tangible components, namely a server, a client, and a means for securing messages exchanged between the server and the client. Applicant submits that the recited combination identifies tangible elements, and that it therefore comprises statutory subject matter.

Method Claim 1 has also been amended to make it relate more clearly to a tangible embodiment. Similar to what is recited in apparatus Claim 4, the method is performed with a server and a client, linked by a data transmission network, and having an authority which defines message exchange rules in the network. Applicant submits that these features are sufficiently tangible to define statutory subject matter under Section 101.

Claim 1 has also been amended to recite the positive steps of the method, so as to define the method more precisely. Thus, for example, the method includes the steps of providing control in a decentralized manner by the representative of the authority, and setting up communication between the server and the client only through the representative of the authority. Applicant submits that Claim 1 defines a proper method, in fulfillment of the requirements of Section 101.

Applicant submits that the rejection under Section 101 is therefore overcome.

All of the claims have been rejected under Section 102, over Urien (US 2002/0138549). Applicant submits that the claims, as amended, define patentably over Urien for the following reasons.

1. Urien fails to show a client which is a smart card or a mobile communication system

Claims 1 and 4 recite that the small client is a smart card or a mobile communication system. In Urien, the client is not a smart card or a mobile communication system. Instead, in Urien, the client is a terminal 1, which is associated with a smart card 2a.

The fact that Urien does not show a client comprising a smart card is apparent from the following teachings of the reference:

The terminal 1 of Urien has "the other hardware or software elements common to the prior art" (paragraph [0068]). The terminal 1 includes a card reader 3 (paragraph [0073]). As in the prior art, the terminal 1 may be an individual computer, with circuits 11 for access to the Internet (paragraph [0022]). The terminal 1 includes a CPU, random access and read only memories, magnetic disk mass memory, a disk drive and CD-ROM drive, etc. (paragraph [0023]).

The terminal 1 communicates with the remote server through the Internet with a TCP/IP protocol. In paragraph [0036], Urien states that a TCP/IP protocol is not presently implemented in available smart cards. Thus, smart cards cannot receive and transmit data packets by such a protocol.

2. Urien fails to show a representative of an authority inserted permanently between the client and the server

The Examiner holds that Urien shows a smart card inserted between a client and a server. This holding is incorrect for the following reasons.

In paragraph [0043] of Urien, the wording "reroute all or part of the data stream" does not mean that the smart card (the representative of the authority) is inserted between the client 1 and the server. It means only that the client 1 may decide to forward to the smart card the messages received from the server, and may decide to send to the server messages received from the smart card. In all of the embodiments of Urien, the data stream goes through the client (see Figures 6, 7, and 8).

As described in paragraph [0157], Urien shows a smart proxy that filters or processes the data originating from the Internet. But, once again, the data are first received by the client 1, and this does not mean that the smart card (the representative of the authority) is inserted permanently between the server and the client.

Paragraph [0153] of Urien shows a filter function, but this passage does not mean that the representative of the authority is inserted permanently between the server and the client.

In paragraphs [0216]-[0218] of Urien, the data stream is decrypted and verified by the filter of the smart proxy. But this does not mean that the smart card (the representative of the authority) is inserted permanently between the server and the client.

3. Urien fails to disclose a system in which communication is set up between the client and the server only via the representative of the authority

Claims 1 and 4 have been amended to recite that communication is set up between the client and the server only via the representative of the authority. Support for the latter wording is provided at page 7, lines 20-22 of the specification. This feature insures that the necessary verifications are effected (page 7, lines 22-23).

Urien fails to disclose or suggest this feature, as is apparent from the following sections of the document:

- a) Paragraph [0170] states that "the filter function 28 does not perform any processing on these data";

- b) Paragraph [0226] states that the "opaque stream can be processed solely by the agents located in the terminal 1";

- c) Paragraph [0241] states that "the data originating in the remote server 4 ... no longer pass through the smart card 2a";

- d) Paragraph [0244] states that "[o]nce a phase of negotiation has been completed ... since the data are directed from the Internet RI to the terminal 1 in the clear";

- e) Paragraph [0248] states that "the opaque data stream is processed by the set  $T_1$ - $T_2$ - $T_3$  and accordingly does not pass via the smart card 2a"; and

- f) Paragraph [0252] states that "[i]n all cases, only a low-volume, low-speed data stream, comprising what are called the critical data, pass through the smart card 2a".

The above-cited paragraphs show also that the smart card of Urien is not inserted permanently between the server and the client, as is now recited in both of the independent claims.

In summary, Urien does not teach or suggest the features now recited in independent Claims 1 and 4. These claims are therefore believed to define patentably over Urien. The remaining claims are dependent, and are therefore also believed allowable.

For the reasons given above, Applicant submits that the application, as amended, is in condition for allowance. Applicant requests reconsideration by the Examiner, and early favorable action.